

Maven Commands List

Cleaning & Building

mvn clean	# Deletes the target/ directory and compiled files
mvn package	# Compiles, tests, and packages the project (JAR/WAR)
mvn install	# Compiles, tests, and installs the artifact in the local repo
mvn clean install	# Cleans and then installs the project
mvn clean install -U	# Cleans, installs, and forces dependency updates
mvn clean package	# Cleans and then packages the project
mvn clean deploy	# Cleans, builds, and deploys the artifact to a remote repository

Compilation & Execution

mvn compile	# Compiles the source code (src/main/java)
mvn test-compile	# Compiles test classes (src/test/java)
mvn exec:java -Dexec.mainClass="com.example.Main"	# Runs a Java class with main() method

Testing & Verification

mvn test	# Runs unit tests
mvn verify	# Runs integration tests and checks build validity
mvn clean verify	# Cleans and then verifies the build

Dependency Management

mvn dependency:tree	# Displays project dependencies in a tree format
mvn dependency:resolve	# Resolves and downloads dependencies
mvn dependency:analyze	# Analyzes unused and declared dependencies
mvn versions:display-dependency-updates	# Shows available dependency updates

Project Information & Debugging

mvn help:effective-pom	# Displays the effective POM after applying inheritance
mvn help:effective-settings	# Shows the effective Maven settings.xml configuration
mvn validate	# Validates the project structure and POM

Plugin & Profile Management

mvn help:describe -Dplugin=plugin-name	# Describes details about a plugin
mvn help:active-profiles	# Lists active Maven profiles
mvn -Pprofile-name clean install	# Runs Maven with a specific profile

Skipping Tests

mvn clean install -DskipTests	# Skips test execution but compiles them
mvn clean install -Dmaven.test.skip=true	# Skips compiling and running tests

Forcing Updates & Offline Mode

mvn clean install -U	# Forces dependency updates from remote repositories
mvn clean package -o	# Runs Maven in offline mode

Would you like me to add more advanced commands? ☑